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## ACCESSIBILITY AND INCLUSION

## 2023 North American School of Internet Governance (NASIG)

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(raw transcript)

## 04 Importance of Private-Public Partnerships to Building Bridges

>> Jonathan Zuck: So in this session we're going to talk a little bit about public/private partnerships. My name is Jonathan Zuck and in addition to being the emy I'm the moderator of this session and I also know the least about it so I'm going to let the speakers do most of the work here and I'll try to craft some creative questions.

So what I thought I would do just to get things started, I went through the bios of the speakers but wasn't sure how to reduce them down so I thought I'd go to each speaker and ask you to introduce yourself and also kind of give the aspects of your background that are relevant to this session, if you would. What are you doing? What are you working on? I know in some cases this is a telecom space, agriculture space, et cetera, and how it relates to this issue of public/private partnerships and accessibility and inclusion.

So I think I'll just start with my own bias towards the room, even though it's beyond being there. So Andrew Mac, why don't you start us off, tell us a little bit about yourself and the work you're doing that's relevant to the topic.

>> Andrew: Sure.

Can everyone hear me?

Great. It's nice to see some faces I haven't seen in a couple of years. It's good to see you all.

My name is Andrew Mack, CEO of ago grow mobile, a platform that connects small farmers with markets around the world, connects them to big buyers that want to see them. And so it's a data platform that relies on connectivity to reach between the edge and buyers in the center. I come out of a background of accommodation of private sector and public sector. I worked at the World Bank for a number of years where I was one of the World Bank's first public/private partnership experts. I then left the bank to start up a company called AM global about 15 years, all about setting up partnerships between companies that wanted to get into emerging markets and ing parts of developed markets and the big donor agencies like the World Bank -- public-private partnership has been basically everything do I.

- >> Thank you, Andrew. Dino, why don't you go next.
- >> Sure, thank you.

I am actually in PR and marketing and through that road I focused on minority groups. Then I came upon some projects with technology and it became a passionate. I worked with Microsoft in various different organizations on discovering why we have a digtality divide and what are the roads we need to take to try to close that. I've done a lot of studies and a lot of talking with a lot of folks across the country and worked with different Chambers of Commerce and organizations trying to get to these parts of the community that don't have a voice and finding out what is really happening in those communities that they don't have proper connectivity or the devices needed to succeed. And so it's been a long journey but we're making some change and we do have the ear of big tech right now because we have been able to prove that it's the right thing to do there's money to be made so people are listening.

>> That's great.

Go ahead, Doug.

>> I'm Doug Dawson, president of CCG consulting. I'm an infrastructure guy and so I have been an ISP in the past and had 100,000 customers. My consulting firm has 1200 clients. That's about 500ISPs and about 700 municipalities and counties and cities. And so I spent a

whole lot of my time putting together public/private partnerships. I just started a list this morning of -- I came up with a dozen different kinds of partnerships I've seen in the last five years. So the world -- the broadband world ten years ago I could have named all the partnerships on two hands and now there's that many being formed every month. So it's really exploding part of the broadband environment these days. So it's a really good time to talk about it.

>> All right. Well thanks a lot.

What I might do is go back to you first Andrew and just actually the crowd here, since you were World Bank is one of the World bank's first experts on public/private partnerships, give us a kind of working definition of that. What does that mean?

>> Sure. It's an interesting term of art and it certainly has changed over the years. I mean, in its broad essence a public/private partnership is any time that you get governments or quasi governmental organizations working with the private sector to try to solve a problem where both have an interest and neither necessarily has all of the anxiety or all of the finance necessary. One of the first big partnerships I worked on was in a place called Kabinda in Mongola, create a mechanism where both public and private sector could invest to rebuild that part of Angola after the civil war that took place. The basic guts guts of a public/private partnership though, it is a joint action where both the private sector and the public sector are invested and where they make a huge effort to try to understand what are their common goals and what are their common rules of working together. That's really the big big gist of it.

>> Moderator: Thanks.

Doug, you said you're an infrastructure guy, and I guess Dino's question is for you as well, whoever wants to answer, I think infrastructure comes up a lot in the context of public/private partnerships but that's probably not the only vector of pub/private partnerships into this question of accessibility and inclusion. So I'm wondering if really anyone on the panel wants to speak to some of the other kinds of public/private partnerships that might speak more directly to this notion of expanding the people engaged and I mean, broadband's obviously one of them but where else do these public/private partnerships find themselves.

>> Doug: I'll start but I suspect Dino has a more deeper answer to me. We're starting to see a lot of partnerships aimed at digital equity, folks putting together plans to get computers into homes, to get people trained on broadband. This is driven by grants, you know, which really kick starts the idea. But for this to be permanent we're going to need

these partnerships. So this is brand-new. We didn't see many of these until the last couple years. So this is what Dino does for a living if I understand. So I'll hand it over to him.

- >> Dino: Well, this is a really good question because it kind of unvails what's going on. So aside from the issue that you have with connectivity, not having Wifi to certain parts of the community, you enter complete different set of challenges, which is these communities not knowing how to work technology. So we have these partnerships being set up around the country where folks are living in communities that are teaching this because we're finding the barriers of language. We're finding the barriers of technology. We're finding the barriers of certain, you know, aging. And all those things come into play and you just can't give somebody a laptop and tell them here's your free Wifi for a year and expect that to take off. So we've created different tracking devices on the twiefs we're giving them with their consent, obviously, so we can see how that device goes home, is it being thrown in a drawer, is it being sold because they need to pay the power? Or are they actually using for what we were hoping they were going to use that but we've forgotten that important step. They don't know how to use it. There's that gap we've created yet again. So we're looking at how to close that and we're doing that with partnerships between, you know, different organizations and big tech. I wonder if that answers your question somewhat.
- >> Moderator: I'm not sure that I completely know the nuances of my own question. Part of the -- my understanding is that a lot of public/private partnerships sometimes come out of the areas of business that are engaged in corporate social responsibility as well, that sometimes they are, in fact, PR exercises that have this side benefit of doing good as a result of the work as well. And I wonder if whether accessibility and inclusion have become sufficiently a part of corporate social responsibility efforts such that, you know, basic accessibility and inclusion of underserved, you know, regions or communities are now part of those kind of PR efforts thap around the world to help make things more inclusive. I hope that question was clear.
- >> Dean know: I think I understood what you said and I think your question has to do besides doing good work are they also making money? Is that what I heard?
- >> Jonathan: Are the CSR efforts in companies beginning to take on this issue of accessibility and inclusion? In other words, folks with handy caps and disabilities, et cetera, et cetera, is that part of CSR, are you seeing that around the world at all?
- >> Dino: Well, there's definitely that effort. There's no question about it, but in my personal experience where I've really seen the effort go full force is when in the

background there is gain. This is a capitalist country. We've got to talk the way -- the way I see it and the way most of us working in this, we see that very clear defined line. Are they coming forward with that? Obviously not. But we don't care because we're getting this work done. So -- but there is that code -- that coexistent, there's no question. Did that kind of answer the question?

>> Andrew: I could speak to that if you like.

So we did as part of the firm that I launched when I left the World Bank, we did a lot of work with the CSR departments of big companies, Chevron, Motorola, ocal, for the -- the CSR budget that you're talking about is incredibly important in most instances but whether they talk a good game most corporates are still not very well oriented to trying to capture social good. So one of the big things we focused on was trying to help them take the thing that they had said they committed to and turn it into part of their business, it would have the sustainability, it would keep going, if one person got promoted you wouldn't lose the initiative or where there's often the case you mentioned a PR exercise, oftentimes what there is the launch of a paper or a big PR exercise where there's a very big press conference and everybody shows up and there's nothing else, no staying power within the company. I definitely agree with -- I think it was Dino who said that it has to have a grounding in the basic business principle of the company. If it's not connected to how you make money, it likely will not last. So that's one thing.

But by the same tone, it's very possible to do. That's where a lot of the time you bring in government. If you're on the corporate side, you say okay this is something that's a positive outcome that ten years down the road I know I want this externallality to happen. We did a big project in road safety with Chevron and two parts of the World Bank and three parts of the Nigerian government and ten other corporates when I was just starting out my firm in 2006 and, you know, that was all about Chevron knew down the road it was better for them to have better road safety. They have products, people, that was a big issue for them to tackle but too big of an issue for them to tackle alone and not front and center without leveraging other people's resources. So we worked very very hard for all of the private sector companies that were involved to pull out of that what were the economic interests that they were going to address by investing in this program, how they were going to be able to keep it going, how they could leverage other people's resources, how it fit with the business, in this case a big project that the -- roads project that the government and World Bank were doing and as a result of that you have a very strong sustainability, that group that we put together is still 16, 17 years later still working and none of the people who are originally involved in it are still part of it. That gives you -- once you reach to the

core of what the corporate is all about you connect it to their business process. Then you've got a really successful partnership.

>> Doug: Let me give you a different perspective on the same question.

We have a big expectation in this country that the ISPs, the Internet service providers, will go out of their way to make sure that people are connected to their networkses. And so there's federal funding programs, ACP is one that gives low income discounts, and -- but what I have found in real life is the ISPs are only giving lip service. Only one or 2ISPs that I know are signing anybody up for real. Most of them are participating in these programs and if you call in and ask to get on it, they will work with you if it's not too hard. They will give up on you fairly easily and. Most of them are participating in name only and they barely sign anybody up. And that's because it's -- it goes back to what Dino said. It doesn't make them any money. They put a lot of effort into signing up a low income household. The government pays a 30-dollar piece of the bill but the ISP doesn't make a penny more than they would have made if they had that customer without the discount. And so we're just seeing them not stepping up and participating in this, but the program was designed with them to take charge and make this work and they're not making it work. They're not signing people up and so we have -- the estimates are, you know, 30, 40 million homes that could qualify for this discount and we have only a small fraction of folks actually getting cheaper Internet.

>> Jonathan: Doug, you mentioned a lot of this was grant based work that you were working on. The kind of obvious role for government in a public/private partnership is money, but I'm wondering if you or Andy or Dino can share some of the other roles the government might play to help facilitate a project? I can imagine a traffic project needing a lot of regulatory help and things like that and a broadband project and there's -- is accountability, for example, one of the roles that government ought to play in these public-private partnerships?

>> Andrew: I could speak to that if you like.

The government really does play a lot of roles. One of the most important roles that government plays is a convening role. Oftentimes it is more difficult for a corporate to say no when a government asks and also safer for them to say yes and for them to bring their - themselves together with the community. A corporate may be able to have a conversation with a community that's underserved with government in the room that they couldn't have otherwise, that maybe makes it safer, it maybe lowers the risk from -- we don't think about it, but corporates are larger -- are typically larger organizations. They

tend to be very conservative and risk averse, right? So one of the best things that government can do is to help redisk a project, right? The other thing that government could do is government has a long-term time frame. When you look at corporates, corporates oftentimes have to, you know, report out quarterly earnings. They have to report out quarterly progress. They have to report out if they receive grants or loans, they have to report out on a regular basis.

Government has the ability to think in two, three, five in the case of Singapore in generational terms.

And what that does is gives more balance and. I'll give you an idea it's very much the same the conditions you might find in, you know, northeastern Mississippi or central valley in California in some places, where we have rural communities that are mostly agriculturally based and they are -- they struggle because there isn't quite the level of connectivity they need and yet we know that within five years everybody will have a smartphone because there will be no more dumb phones sold in the developing world. And so government, which has the ability to look at these five-year plans says, okay, I'm going to seed some of that money to help the private sector to get into these areas. We for get how much a lot of the models that underGERD our society are actually density based models. Think about the banking system with bank branches and ATMs. Think about the old it

ny systems where you're close to where all of the big cell phone tours and things like that. So if you work together with government you have that ability to leverage research, resources and their convening power and in the case of Tanzania, their government similar in Columbia, where we're also working, they're being very aggressive in trying to help the private sector get out into those rural areas because they know down the road if they can convert those rural people into rural data customers, they've actually got a potentially viable business model.

>> Doug: Let me give you a real example. There are cities in the U.S. who are stepping up big time. West Demoin Iowa just decided they were going to build a conduit network to every home and business in the city and in having that discussion they said there was a very reasonable chance they never get all their money back. So they know that's something that the private sector was not willing to come to town to do because that was a very expensive undertaking. Hundred percent buried, the most expensive kind of construction, but they knew once they built it that ISPs would show up and serve on it and in fact ISPs have shown up and are serving on it. Google fiber is there, century link decided to get on it. Probably going to be three or 4ISPs on this work but they spent the money to get it done because they said the long-term benefits that come to the city for having

everybody far out weigh any costs that they would lose on bond financing over the years. And they came to that conclusion by looking at cities who have already done, chat 92ga Tennessee built their own fiber network and showed a several billion dollar benefit to the community as a whole from doing it. So west Des Moines lowa said we'll spend the money. It's not really a partnership in they spent all the money and they hoped somebody would show up for it but they took that big bite as he just talked about to say we will be the infrastructure provider. In the long run we know people will take advantage of it and we know our community will be better off. And that's become ago more interesting and widespread model but it's very hard for local politicians to jump over that cliff. That's a very brave thing to spend money on something that you know loses money except we do it on stadiums every year but...

- >> Dino. And along with both those things you just stated, I want to reiterate the factor that one of the newer issues is what are these new communities doing with these devices and the connectivity? Are they using it? Do they know how to use it and that's an issue that we're identifying that's pretty prevalent in all these different communities we're going into so we have an active movement right now to not only teach them the basics, teach them how to figure things out themselves. And that's a movement we have to go.
- >> Jonathan: We talk a lot about connectivity and broadband and that infrastructure rollout, investment, is sort of foundational to this notion. But I'm also wondering the extent to which once that infrastructure's in place, how we might think creatively about this motion of inclusion. I have the most familiarity with Andrew's business because if you think of farmers that don't have access to transport, for example, that prevents them from being engaged in a central marketplace. So I'm interested, have public/private partnerships played a role in nonsort of broadband based projects but that are in fact then exploiting broadband to work on a different type of inclusion, if that makes sense.
- >> Andrew: I could certainly speak to that. If you think about the basket of services -- so about a billion and a half people around the world are in small farming, okay. Most of the people in most of the countries it's a larger population than China or India if you take all of the small farmers in those communities. It's true, they have to get to markets. But there are a whole basket full of other services that they're missing out on because they're off the data map, right? They're missing out on access to finance. They're missing out on access to healthcare. They're missing out on access to education. And one of the things that we've seen is that there are companies, for example, credit unions and banks, that want to deal with those people but if the cost of client acquisition is too high, the cost of servicing someone is too high because you have to ride on a motorbike all the way out to the edge of the road two hours and all the way back, that's a long time to make a \$2,000 loan. So

they're interested for example in micro credit. So what we found is that actually makes for a very good public/private partnership because the data, the government cares deeply about making sure people are more successful economically. That's their tax base. They are very interested in making sure they're more successful in terms of their health because that's their worker base, right? So what you're starting to see is the infrastructure piece is just the leading edge of a whole basket of services which you might say go into I can making a more productive, engaged, and frankly more economically successful and less unstable citizen base which every government wants. So part of this is about reaching out into the country side, about reaching into some of the under served urban areas but they have a lot of the same basket of services that government wants them to have and that the private sector probably can't do just on their own.

>> Doug: Interestingly in this country private sector is out on front in farming. Land of lakes, John Deere, a whole lot of these different groups are putting together entire giant software packages, drones, I mean all this stuff and of course it's only working in places that have the infrastructure. So the farmers are ready for it. I talk to farmers every week, who got connected and I'm talking to farmers Dez disprat to get connected. A farmer told me this week he's not a farmer anymore. He's now an IT specialist. But a huge amount of farms don't have the connectivity and so the second they get it, those training packages are there for them to use it. So the private sector has Leopold out ahead of that. Of course, their incentive is they make money selling all these various pieces of equipment and software that go along with that connectivity but, you know, it's the inner city and poor neighborhoods and large apartment buildings where our problem is. You know, private sector's taking care of farming in this country. Around the world that's not true as you mentioned but here they're all ready for broadband.

>> Jonathan: But Doug, let me follow up with that. Once the broadband's in place, is there a role for government to play in partnership with the private sector to make the use of these new technologist -- I don't know if it's training or implementation, or is the private sector really in a position to just take care of that once the broadband's in place? Is there -- once everyone has broadband, is there no longer a need for public-private partnership.

>> Doug. There's a huge need not just for farmers. Farmers are going to be trained by those large companies.

Now, there is an interesting agricultural need here. One of the stakeholders who has just been ignored are migrant farm workers and that's become a very competitive market just to get them to come to farm in the first place. So having broadband is essential to get them there but they also need help in using broadband. You know, they want to

communicate with home every night and do all those things that you want to do on the Internet. And so there's a -- in North Carolina there is a -- there has been a group formed exactly for that purpose, to train those folks and to get out and work with them but the farmers don't need it. Now, Dino is talking about also there's millions of people who need it, it just doesn't happen to be farmers.

>> Jonathan: What are some examples outside of agriculture, where public-private partnerships will come into play once broadband is in play.

>> Dino: How about native Americans? That's a big issue in this country. You know, do I a lot of -- did I a study with them and you have entire reservations that do not have any connectivity and they need to get off, get out of the reservation and probably go down a couple of miles and connect atmic domedz. So we have some big issues out there in other groups.

>> Andrew: I guess I would disagree you with a little bit, Doug. I think there are an awful lot of places especially in communities of color out in rural areas where there isn't very good connectivity and there also isn't very much, you know, digital nativeness. So people haven't groan up with the technology as much because they have been off the map for a while. But to your point Jonathan about what industries or what other sectors, a really good one is rural healthcare. I was read ago statistic that said that 50 percent of all of the rural hospitals in the United States have gone out of business or are going out of business within the next two or three years. So we need to -- clearly there's a role for telemedicine and things like that but you still have to figure out what the business model is for that. You still have to make it work with in-person medicine and you have to have -- give people the ability to be informed consumers of whatever it is they're getting. That's one of the things that I think we take for granted is groan up with so much technology in our lives that we know how to manipulate. I look at the difference between myself and my 11-year-old son and he guesses right when he's searching for things more because he's groan up with it. I think there are things like access to social services especially healthcare which are mission critical, where the cost outlace are very significant, where I don't think we've really solved the problem yet and there are for sure be a role for government down the road.

>> Jonathan: I guess I would add to that in the context of healthcare some of the issues has got to be regulatory because right now the healthcare industry is led around in many respects by what Medicare and Medicaid are doing. So unless they accept reimbursements or do reimbursements for remote care then the health insurance companies won't either. So government's playing a role in changing the way we think about how doctors are compensated is going to be a big part of remote healthcare for sure.

>> Doug: Let me follow up. There's probably 40 million people who are below the digital divide. We have a huge number of people in both cities and rural areas who don't have any digital knowledge. Never used a computer. So I was talking about farmers. If you go to a rural place where they've never had broadband, you need to train almost everybody. It's really -- I mean, it's a massive one time effort to get those folks up to speed. I mean I talked to a rural county in Murry where half of the residents have never used a computer at home, any sort of digital device at their house. They simply don't have the base knowledge.

In fact, since they've never done it they don't think they need it and they don't want it, until they get it, then they quickly change their mind we know that but yes.

- >> Dino: We don't even have to go rural. COVID taught us that --
- >> Doug: It's everybody.
- >> Dino: Connectivity even in big cities such as Manhattan we couldn't get a third of the children in Manhattan to connect. And then we had another huge issue where you were mentioning healthcare where social workers could no longer reach their clients and these folks could not download apps to get medications and do the things they needed to do even though these social workers who had been blocked from visiting their clients by law were desperate to try to help them. And we actually lost people due to that. That healthcareelment is so extremely important. I'm so glad you brought that up because this is affecting people in all sorts of ways. It's not about getting chron line and et going on Facebook. This is healthcare, banking, education, survivalship. I don't -- technology is no longer a luxury, it is a human right and that's what I think we need to get into everybody's mind at this point in our a country like ours.
- >> Jonathan. So what do we need to be doing differently? How do these programs need to be structured to be more effective? Is it about promises being kept? Accountability? Do we need to approach these public-private partnerships differently than we have been historically to make them more effective? What's the next step? What should we be pressing our representatives and frankly corporations to be doing different than they're doing now.
- >> Doug: Right now there's almost a 3 billion-dollar grant program to give communities money to establish digital equity programs. Those are only going to be effective after they keep going after the one year funding goes out. What we have to do is everyone involved in those has to -- you know, if you just get those program and you put ten trainers out that go to people's houses and teach them to use broadband but a year later you go to zero

trainers, that's not really going to make any long-term change in the community. But if those programs are set up in such a way that there's still people going out and training people that's the long-term solution. We're not going to run out of people who don't know how to use the Internet. New generations come along all the time and so we have to find a sustainable model. Government, nonprofits and a little bit of corporate are the ones who have to do that. It's mostly nonprofits and government that sort of have to make this work.

>> Dino: It's the point of this panel, it's definitely looking at how to form these partnerships, make them sustainable long-term, and also be aware that technology is changing all the time. So this education factor does not just stop. It is a long-term thing. People start aging out and their technology skills are also aging out. So we have to look at the real picture and not just from the capitalistic view. We have to refocus our view on a more humanistic view I think. Like --

>> Jonathan: Is anyone doing that? Are there examples that folks here can be looking to for where it's being done right that others should be following or is it really just new -- you've got a lot of folks in academia here. Are these areas of research? Do the answers exist and we're just not doing it or do we not know how to do it.

>> Doug: There's not been really enough of it been done but there's some very good examples. In Chattanooga there is nonprofit run by Deb Sosha and she went to the -- the City has their own broadband network but they never did any digital inclusion, never trained anybody and she went to them with a proposal to give her some funding. She raised the rest elsewhere and she announced to the public that she was going to have training schools. She thought she might get a couple hundred people and she got like 5,000 people signed up. I mean, the need is really drastic there and they had no idea it was that big. So, you know, they've not been able to train that many people yet but her system is really working. And what she found works is you have to train each person on what they're most interested in. If you want to go teach my grandmother how to use Internet, teach her how to use knitting patterns because you got her hooked, man. And somebody else it's going to be how to get on social network. Someone else it's playing games. If you teach each person what they most want to do, they learn all the rest on their own. That's the -- so we know the training methods that work, but there's very few of these programs. Hopefully these grants will kick start up hundreds of new ones, but -- and there's been very good systems. There's a place in Charlotte North Carolina who has given out something like 100,000 computers to homes that don't have them and to homeless students and that sort of thing. And so they really have it down to an art form. They actually raise the money. They pay high school kids to refurbish the computers so they make ad gay living wage and learn a skill. They get them out to people and they train them how to use them.

And so it's -- you know, there are a few programs around but unfortunately, you know, it's probably not a list of more than a hundred. I mean, I'm just guessing but it's not gigantic, unfortunately. But we now know the models that work, so...

>> Andrew: I think I could speak to this. There are three principles, if you will, that I think are really important. One of them is urgency. There needs to be some urgency in what we're doing. There needs to be -- in the case of the work that we're doing with farmers in Tanzania, Ghana, and Columbia, their urgency is they have crops they need to get to market. If they don't get them to market they lose that money. So they're trying to feed their family, trying to make a better life for themselves. That is a real realtime urgency, right? The second thing is trying to find the right partners. It's not just necessarily the people who are up on the stage with you, it has to be someone for who there is an economic benefit. If the private sector is not going to make any money doing this, then that's going to be a miss over the medium term for sure. And I think the third thing that's probably the most important thing is having some real clear goals that people can call you on. Because what we've seen in a lot of instances is exactly the kind of program that you mentioned, where there are commitments that are being made, there's the ceremony that takes place, there's TV, a couple of people put it on their Linked In profiles and then nothing really happens. And if there is -- if we have concrete goals where we can say this is something that needs to be accomplished, here's how we're going to measure our success, here are the people at the table, and constituents, citizens and NGOs and the press and others can go back and look at that over, you know, six months down the road, two years, they can see whether there's been progress or not. That's really meaningful. Too many things get started, too few get finished. The urgency argument there,'s one thing that's also an Africa example in this case but it's very -- I think it's related, is during COVID. As you may remember as COVID started to figure out who got access to the vaccines and wealthy countries bought up a lot of the vaccines and were not interested in sharing them in any meaningful way. And some of the very -- the most important business and commercial leaders started talking to the African union and others and three or four -- four or five of the most important actors on the continent got together and they called each other every night to say okay we need to solve this problem, it is urgent, we can measure what it means to get these vaccines to people or not, right? We're tracking this stuff all the time. And they knew that -- so he this knew there was an urgency around it and that it was ultimately about the economic future of the continent. And they came together and they solved the problem for Africa and Africa made it out of this -- out of the biggest health crisis in recent history. So it certainly can be done but it's got to be done in a way where it's not a shortterm let's get a PR event and move on to the next thing.

>> Jonathan: Doug and Dino, you guys work more than Andy does, one of the government agency with which I have some experience is economic development offices at the state and county level. And I feel like historically they have been very focused on basically trying to poach a factory plant from another state or county to move to them to create basic employment. Is there any kind of light on the horizon with those economic development efforts to steer away from the sort of old world way of thinking and steer in terms of, you know, entrepreneurship and other areas because that seems like an area that would be right for public-private partnership, because Amazon for example has every desire to get rid of all of its employees, right? So they don't want to be called on to employee more people, but I think they would love to be part of an effort to train more people to be entrepreneurs, to be online sellers, to do things like that that are as you say economically beneficial to both parties. And I'm just wondering whether or not you guys have had any experience with these economic development offices and whether there are any movement in that direction or are they still sort of ensconced in this bring a in factory here and I'll give you a tax break.

>> Doug: Interestingly that model is broken. Hardly anybody does that anymore except you can't turn down someone bringing a gigantic car manufacturing plant, right? But communities have for a large part stopped poaching each other. In fact, the biggest -- in rural counties where I work in a lot of rural counties, the number one thing they are stressing is work at home. People working at home flood their economy with good paying jobs that they're making from an employer in another state and when you're in a county where the average household income is a third of what it is in cities, you know, getting people making 50, \$100,000 jobs in their communities is revolutionary. They make more money getting a hundred people in that county with good paying jobs online than they do bringing a in factory. So that's really been the new thrust. And of course they need broadband to do that, but there are a lot of communities that are really working towards that. Some of them are paying people to come there to work at home. You know, once they get a fiber network in their place. So I think that -- I think a lot of local economic development folks have recognized that broadband is one of the two or three keys to their long-term success. They will tell you that. So, yeah, we just don't -- I mean, I'm sure there's still communities doing the old style but I've talked to a hundred of those agencies in the last two years and hardly any of them use that model anymore.

>> Jonathan: Are they going beyond -- I keep trying -- are they going beyond broadband though to the work itself? In other words, like I said, helping people figure out how they're going to work from home or what they might do once the broadband's in place.

>> Dino: I can give you a clear example. What we have done is --

- >> Jonathan: Get closer to your microphone if you would, Dino, thanks.
- >> Dino: I could give you a clear example of this working in the right direction. So we reached out to different organizations. One of them being the Georgia Hispanic Chamber of Commerce which is one of the largest in the country. It's all depending who's in the helm. And she got this right away. And what they created is is a subsidiary through the chamber called the business center where they became very active and still are on educating the entire state in different, you know, online, by going there in person, and making sure that technology is part of the latino educational forum. It's not just about this, that, and the other, but they've recognized the importance of technology. They put it in the forefront. So they also recognize the impact it's going to have economically in the state by having these folks well educateed going forward as we know the latino community is going to be the biggest in the country in the next 20, 25 years. So I've seen the positive and folks that are getting engaged and getting prepared for what you just asked, and that's a beautiful thing when you have the white people behind the helm that recognize and understand and can see forward and are visionary.

>> Jonathan: Thanks a lot.

I'd like to open it --

>> Andrew: Just one tiny little addition is nowadays if someone were to go -- when Tennessee and Alabama and Mississippi got into fights over who was going to get the next car plant, one of the things that came to the fore really early on was you can't even get a job in a car factory anymore unless you're pretty good with technology because the good jobs are becoming more and more sophisticated. The cars and whatever it is you're manufacturing is requiring more and more or else it will be done by a robot, right? So I think that's also -- it's something that's happening right now. There's no way around it.

>> Jonathan:

Thank you. Questions from folks.

>> Can you hear me?

>> Yes.

>> Okay.

So I heard you guys talk about, you know, using work from home as, you know, better perhaps safer option for people, but we have CEOs like Elon Musk talking about how, you

know, working from home is morally wrong. We know the vast majority of people of color have jobs that they are forced to do in person which we saw, which is why our communities were Des mated by COVID. You know, what are organizations and governments doing to encourage people to be able to work from home and by setting up these types of infrastructures and protecting the right to be able to work from home when possible.

>> This is my personal opinion. This is Doug. I don't think the government's doing anything for the Elon Musks of the world but a lot of governments are letting their employees work at home. In fact a lot of governments have completely embraced that idea. So they -- that's a good start but, you know, it would take an act of Congress to mandate, you know, a corporation has to let people work at home. That's probably not even constitutional. So I don't think we can even stop the very largest corporations. But an awful lot of corporations have completely fallen in love with the idea and they're not going backwards. So I think this is one of those over ten years you're just going to see it spread out to more and more of the economy. It moves downhill and I think that, you know, the right fact that it's a permanent movement probably gets at a lot of more people over the next decade. That's my own guess.

>> Jonathan: I think we have a question online but I'm trouble figuring out who it is. Do you want to turn on your microphone and ask your question?

Although we're in Webinar mode.

- >> I have a question.
- >> Jonathan: I'm just trying to get the I don't know Line question if I can. I appreciate that other people have them. It's your question. That's the online question? Okay.
- >> (Away from microphone).
- >> I thought it was Wilfredo, yeah.
- >> There are many positives about public-private partnership, but at the same time there is a flip side when -- we feel that multistakeholder model is much better and in public-private partnership there is a danger of the business actor progressing his influence to the point of writing government policy. With this paper, with his pen. It has happened in many sectors in many countries. So why do we still persist with this public-private partnership terminology? Even if you have improved it, it could mean the same thing for many people, many countries.

- >> Andrew: So certainly public-private PIP is a tool and can be used well or can be used badly. I think it depends a lot on the public -- the private sector partners and on the strength of the government. What we find is a lot of the times where governments are weak and the private sector is strong, especially in resource focused economies, it's harder to create that right mix. I will agree with you completely.
- >> Isn't that what multistakeholder model balances, that there is a public -- that there is government, there is private sector and then with civil society balances the whole thing?
- >> Andrew: I can see that working in some instances but definitely not in all. I can tell you from some of the experiences we have had, what we end up seeing is that government and private sector actors come together to form an NGO which actually does the work and in some instances that's a nice way to go. But I really think it depends on the individual case.
- >> Doug: And in booed band, we're seeing that. There's a whole lot of communities we're working with right now who are using some government funding and commercial funding and they're create ago cooperatives. It's a business that's going to be the ISP for the community. They're going to make sure everybody gets connected, every household. They're going to make sure everybody gets trained. And so that's the middle ground between the two pieces. Unfortunately, that's a rare model. You're exactly right about that, but it's a great model.
- >> Jonathan: That's a good segue into Alfredo's question, what is the key difference between a public-private PIP and a private finance initiative? Can both coexist in a project after a project is completed, who owns it?
- >> Doug: The financing and the operation are just two different things. You're absolutely right about that. And the answer is there's every -- I've seen examples of those two things working well together and those two things conflicting. It just depends on the circumstances. I mean, you know, the private finance initiative can really be a wonderful thing when it works right.

But it goes back to the earlier question, who's in charge of it? I mean, that's what it really boils down to.

>> Andrew: Well, and I think it goes back even further. If you set up the partnership in a way that is largely transparent and is goal based, where everybody knows what their role is and where external parties are read in at the very beginning, then your risk of elite capture is really much lower, but if you don't have clear goals and there's a lot of fuzzy talk at the

beginning, you may never have any action at all or if you do, there may be the kind of action that you don't want.

- >> Doug: And you just described the No. 1 problem with PPs in this country, people don't talk out the pros and the cons on Day one before they start. Nobody likes to talk about the downside. They only want to talk about the good goals.
- >> My name is Shankara from Ghana. I'm coming from a country where we face a lot of these connectivity issues. So when it comes to the rural communities in Ghana, especially the northern parts of Ghana, we have issues where females do not have their devices to get connected and some of the communities, and if it does, you have limited connectivity. So here (Away from microphone).
- >> Doug: You're cutting off.
- >> (Away from microphone).
- >> Dino: I can't hear anything.
- >> (Away from microphone).

(Microphone cutting in and out.)

>> Doug: We're not hearing the question. Yeah.

>> Jonathan: Do you understand the question?

>> Andrew: Let me paraphrase the question. He's talking about -- he's from Ghana. He's talking about the fact that there are low density communities, especially in rural areas where the business model that we have in the city may not work as well and as a result there is no real economic logic around connecting those people. I work in Ghana. I have a team in in a. So I can tell you from personal experience I understand the problem. I can also tell that when there's enough value at the end of the line, people have a way, especially Africans who are immensely entrepreneurial, right, have -- find a way to make it work. So what do we see? When I first started working in west Africa there were about 20,000 cellphones in Nigeria. Now there's a cell phone for every man, woman and child of over a hundred million, right? So what it means is that we have to connect up the economic logic. Sometimes government can help do things that need being done. In the

case of Uganda government said we are three cell phone license, national ones. We're going to say that we mandate that you have 4G coverage in 90 percent of the country. Everybody bidding for a license made that commitment. But then government needs to stick with that and they need to think in advance is there an account logic for making a cell tour work. What I think oftentimes happen is the barriers to entry of a public-private partnership on the private sector side are too low. They haven't thought it through. They want the access to -- they make a promise and if they know no one's going to be holding them to it, then it doesn't matter. It's got to work in the end for all of the partners or else it doesn't work as a partnership. So in the case of Ghana, you have to figure out why are the -- why are we trying to connect these people? What are they going to do with the Internet? To the earlier point where you were talking about what's going to be -- you know, ifs it not knitting for his grandmother, right, then what is it? Agriculture in the case of Ghana. If you're a sorghum farmer you need to get your stuff to market. Full stop. So that's your entry point but if we haven't done enough thinking about the business model and that's really the next frontier I can.

>> Jonathan: Last question here.

>> Hi. I'm wondering if in the actual brass tax of implementation finding these, making these work is use of local economic development offices viable. If you walk into the local office at I don't know, Lauden county, I don't know, but say hey is there anything you're trying to get accomplished? Are there goals that you have that a public-private partnership might assist? Or is it just, you know, you got to go in there and sell them anything from ground up?

>> The answer to that is if you want to put those offices on a scale of one to ten, there's a bunch of ones, there's a bunch of tens around and a lot of people on the plane. Some economic development offices are just amazing. They have completely grasped these ideas and they're outpromoting them. Other ones are sort of place holders and don't get very much done. It's back to the accountability. And so, yeah, we see every possible range of good, the bad of those offices. Good ones can make a giant difference.

I'm in western -- make sure the most rural people get the most broadband. The No. 1 goal for the next three years. Doing a pretty good job of it. So other places are not at all effective.

>> Jonathan: We've reached the top of the hour. Really appreciate join me in thanking Doug, Dino, and Andrew for their participation of the panel.

>> Doug: Thank you.

>> Jonathan: And this is now the start of a 30 minute break and we'll be back -- is it not? Fifteen minute break?

Oh, I have until 2:15? Oh, I didn't think my schedule -- we can ask another question. Yes. Sorry.

>> I'm Cosi from Brazil. My suggestion is to move from data Internet you have now with our operator to free Internet available. It's not possible for us in our country in Africa to know or the suggestion in Europe and every place in the world, but when you buy data for 1G to just upload something, it's not economically usable for something we need to make for shares, for example: Is it possible to have another model of business on this area? Is it possible? When we discuss we were provided Internet in our region, every time we say global Internet connectivity is very much because it's very much for them, what can we do, why. The second is also training. If you don't know how to do with Internet, you just put your money -- Internet use it for necessity. And need Internet for example to make -- some people in my area need only Internet to make what's app. That is not normal. We need to educate our people. Training also is something. Can we have fun to train people, to let them know what is important for them in Internet area?

>> Jonathan: Anyone who want to take that.

>> Doug: I can answer the first question. I actually do quite a bit in Africa. I worked in Nigeria the last couple years and Nigeria has probably the most creative wireless economy in the world. You can buy Internet for a minute. You can buy it for one use to upload a file. You can buy it for an hour, six hours a day, three days a week. Every single possible way to buy Internet there and for rural uses they're real cheap, literally pennies. So the cellular carriers have determined how to monetize it so every one is affordable and now we're seeing they're starting to build fiber networks in Lagos and those folks are adopting the same model. Students are buying three days of high speed connectivity for their exams and then dropping it. It's really interesting model to match the needs to the way that the providers are selling it. I don't see that model in a whole lot of other places. I think we all been talking the whole time about your second question. We all think the world needs a ton more training. So I think I'm get us all to agree to that.

>> Microphone.

>> Sorry. I would compare a need to Rwanda, roughly speaking both small markets, both very not big economies and yet row Wanda has taken a very aggressive -- they've got a lot of leadership, marketed themselves very aggressively so the people knowra Wanda. They

have made a huge point of integrating with their neighbors because they recognize themselves as being a small market and as a result Rwanda does a lot of IT for their neighbors. When you start to drive more usage, drive down the cost of anything, the more frequency there is. So combination of vision and integration with other larger players is likely what's going to get costs to go down along with regulation that support that. I don't think if there's anything that can keep from being the next Rwanda. There's no difference between the Benua that I know.

- >> I think the difference was simply ten years ago Rwanda said they were going to make that their No. 1 economic priority and then they didn't.
- >> That's what I mean about having the vision and sticking with it. Ten years they stuck with it -- easy for me to invest in Rwanda and hard for me still to invest in Benoa.
- >> Dino: I had a question how are you so involved in other countries? I happen to be Columbian. How do you deal with corruption or the red tape in these countries to get things done?
- >> Doug: You don't have to go overseas to get that.
- >> Andrew: I was going to say that is a miss perception that only exists in other countries but with a we tend to do is focus on -- we tend to focus on the individual, right, and the drivers of the individual. The closer you are to the edge, the closer you are to the citizen, the harder it is to pull off corruption and what would he have seen is at scale and at the -- you know, at the personal level, people have the tools to get around corruption.
- >> Jonathan: Last question.
- >> Ali from Pakistan. My question is about when we are talking about the public and partnership, private partnership to bridge the gap of connectivity in the rural areas, actually the rural areas in every country mostly is the most difficult operation to operate as well as there is less revenue generation from that particular community segment. So clearly it looks like a losses from public sector they are going to build and how much they are going to sacrifice the separation cause, licensing, et cetera, and then private sector highway, what are the -- I mean, gap which -- private sector can make so there is a service -- there is a clear that -- remind is there, economic community is growing and the demand side is there but the supply side, what could be the key benchmark.
- >> We have that exact issue here. The vast majority of the surface area of the U.S. has terrible broadband and so this country is throwing 42 billion-dollar grant program we threw another hundred billion dollars of what's called ARPA local funding to help get this

fixed. The government has to subsidize getting infra instruct in rural places. Commercial companies are not going to go out and build rural networks where everybody lives. The problem is that's not a sustainable model back to the word we keep using because somebody's got to pay to keep that running over the years. We're building them now. Let's hope over the next decade we figure out how to make them sustainable before they deteriorate and don't work anymore. But the answer is the government has to step in to solve rural economic structure problems. There's no other way around it that I know of.

>> Jonathan Zuck:: Those are great words to end the session on. Once again I'll ask you to thank Doug, dean Dino, and Andy for their presentations.